

| | | | | | |
|---|---|----|--------------------------|-------------------------|--|
| IDS Form PTO/SB/08: Substitute for form 1449A/PTO | | | Complete if Known | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | Application Number | 10/814,243 | |
| | | | Filing Date | April 1, 2004 | |
| | | | First Named Inventor | David Peter VAN HEERDEN | |
| | | | Art Unit | 3725 | |
| | | | Examiner Name | PARADISO, JOHN ROGER | |
| | | | Attorney Docket Number | 9118.0002 | |
| Sheet | 1 | of | 2 | | |



| U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS | | | | | | |
|---|-------------|--|--|--|---|-----|
| Examiner Initials | Cite No. | Document Number | Issue or Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | |
| | | Number-Kind Code ² (if known) | | | CLASS | SUB |
| | | US-2003/164289 A1 | 09-04-2003 | Weihs et al. | — | — |
| | | US-2003/077474 A1 | 04-24-2003 | Rabinkin et al. | — | — |
| | | US-2002/179921 A1 | 12-05-2002 | Cohn, Michael | — | — |
| | | US-2001/046957 A1 | 11-29-2001 | Weihs et al. | — | — |
| | | US-2001/038029 A1 | 11-08-2001 | Weihs et al. | — | — |
| | | US-6,413,800 B1 | 07-02-2002 | Kyle, Robert | — | — |
| | | US-5,965,576 A | 09-21-1999 | Pompeo et al. | — | — |
| | | US-5,477,009 A | 12-19-1995 | Brendecke et al. | — | — |
| | | US-5,175,410 A | 12-29-1992 | Freedman et al. | — | — |
| | | US-5,038,996 A | 08-13-1991 | Wilcox et al. | — | — |
| | | US-4,715,526 A | 12-29-1987 | MacNeil et al. | — | — |
| | | US-4,607,779 A | 08-26-1986 | Burns et al. | — | — |
| | | US-3,158,927 A | 12-01-1964 | Saunders | — | — |
| | | | | | | |
| | | | | | | |

Note: Copies of the U.S. Patent Documents are not Required in IDS filed after October 21, 2004

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|--------------------------|---|--------------------------------|--|--|--------------------------|
| Examiner Initials | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | Translation ⁶ |
| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | | | | |
| | | JP 2000/323593 | 11-24-2000 | Yazaki Corp. | | Abstract |
| | | EP 0 907 064 A2 | 04-07-1999 | Dinuțescu, Horia A. | | Abstract |
| | | JP S57-102029 A | 09-28-1982 | HITACHI LTD. | | Abstract |

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|--------------------------|---|--------------------------|
| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | Translation ⁶ |
| | | International Search Report and Written Opinion mailed February 11, 2005 in a corresponding application. | |
| | | "Technique for Obtaining an Environmentally Secure Adhesive Seal"; IBM Technical Disclosure Bulletin; December 1, 1986; pages 3085-3087; Vol. 29, No. 7; XP002025799; ISSN: 0018-8689; IBM Corp.; New York, US. | |
| | | S. JAYARAMAN, O.M. KNIO, A.B. MANN, and T.P. WEIHS; "Numerical Predictions of Oscillatory Combustion in Reactive Multilayers"; Journal of Applied Physics; July 15, 1999; pp. 800-809; Vol. 86, No. 2. | |
| | | D. JOSELL, A. CEZAIIRLIYAN, D. VAN HEERDEN, and B.T. MURRAY; "Thermal Diffusion Through Multilayer Coatings: Theory and Experiment"; NanoStructured Materials; 1997; pp. 727-736; Vol. 9, Nos. 1-8. | |

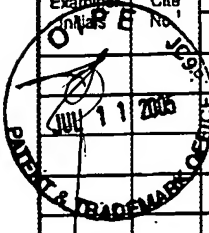
| | | | | | |
|---|---|----|---|--------------------------|-------------------------|
| IDS Form PTO/SB/08: Substitute for form 1449A/PTO | | | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | | Application Number | 10/814,243 |
| | | | | Filing Date | April 1, 2004 |
| | | | | First Named Inventor | David Peter VAN HEERDEN |
| | | | | Art Unit | 3725 |
| | | | | Examiner Name | PARADISO, JOHN ROGER |
| Sheet | 2 | of | 2 | Attorney Docket Number | 9118.0002 |

| NON PATENT LITERATURE DOCUMENTS | | | |
|---|--|--|--|
|  | | S. JAYARAMAN, A.B. MANN, O.M. KNIO, D. VAN HEERDEN, G. BAO, and T.P. WEIHS; "Modeling Self-Propagating Exothermic Reactions In Multilayer Systems"; Materials Research Society Symposium Proceedings; 1998; pp. 563-568; Vol. 481. | |
| | | K.J. BLOBAUM, D. VAN HEERDEN, A.J. GAVENS, and T.P. WEIHS; "Al/Ni Formation Reactions: Characterization of the Metastable Al ₃ Ni ₂ Phase and Analysis of Its Formation"; Acta Materialia; 2003; pp. 3871-3884; Vol. 51, No. 13. | |
| | | A.J. SWISTON JR., T.C. HUFNAGEL, and T.P. WEIHS; "Joining Bulk Metallic Glass Using Reactive Multilayer Foils"; Scripta Materialia; 2003; pp. 1575-1580; Vol. 48. | |
| | | U. ANSELMINI-TAMBURINI and Z.A. Munir; "The Propagation of a Solid-State Combustion Wave in Ni-Al Foils"; Journal of Applied Physics; November 15, 1989; pp. 5039-5045; Vol. 66, No. 10. | |
|  | | A.J. GAVENS, D. VAN HEERDEN, A.B. MANN, M.E. REISS, and T.P. WEIHS; "Effect of Intermixing on Self-Propagating Exothermic Reactions in Al/Ni Nanolaminate Foils"; Journal of Applied Physics; February 1, 2000; pp. 1255-1263; Vol. 87, No. 3. | |
| | | | |
| | | | |
| | | | |


| | | | |
|--------------------|--|-----------------|---------|
| Examiner Signature |  | Date Considered | 3/16/06 |
|--------------------|--|-----------------|---------|


EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | |
|--|---|--------------------------|-------------------------|------------------------|-----------|
| IDS Form PTO/SB/08: Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i> | | Complete if Known | | | |
| | | Application Number | 10/814,243 | | |
| | | Filing Date | April 1, 2004 | | |
| | | First Named Inventor | David Peter VAN HEERDEN | | |
| | | Art Unit | 3725 | | |
| | | Examiner Name | PARADISO, JOHN ROGER | | |
| Sheet | 1 | of | 2 | Attorney Docket Number | 9118.0002 |

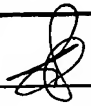
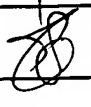
| U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS | | | | | | |
|--|-------------|--|--|--|---|----------------|
| Examiner Initials | Cite No. | Document Number | Issue or Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | |
| | | Number-Kind Code ² (if known) | | | CLASS | Figures Appear |
|  | | US-2003/164289 A1 | 09-04-2003 | Weihs et al. | — | — |
| | | US-2003/077474 A1 | 04-24-2003 | Rabinkin et al. | — | — |
| | | US-2002/179921 A1 | 12-05-2002 | Cohn, Michael | — | — |
| | | US-2001/046957 A1 | 11-29-2001 | Weihs et al. | — | — |
| | | US-2001/038029 A1 | 11-08-2001 | Weihs et al. | — | — |
| | | US-6,413,800 B1 | 07-02-2002 | Kyle, Robert | — | — |
| | | US-5,965,576 A | 09-21-1999 | Pompeo et al. | — | — |
| | | US-5,477,009 A | 12-19-1995 | Brendecke et al. | — | — |
| | | US-5,175,410 A | 12-29-1992 | Freedman et al. | — | — |
| | | US-5,038,996 A | 08-13-1991 | Wilcox et al. | — | — |
| | | US-4,715,526 A | 12-29-1987 | MacNeil et al. | — | — |
| | | US-4,607,779 A | 08-26-1986 | Burns et al. | — | — |
| | | US-3,158,927 A | 12-01-1964 | Saunders | — | — |

Note: Copies of the U.S. Patent Documents are not Required in IDS filed after October 21, 2004

| FOREIGN PATENT DOCUMENTS | | | | | | |
|---|-------------|---|--------------------------------|--|--|--------------------------|
| Examiner Initials | Cite No. | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | Translation ⁶ |
| | | Country Code ³ Number ⁴ Kind Code ⁵ (if known) | | | | |
|  | | JP 2000/323593 | 11-24-2000 | Yazaki Corp. | | Abstract |
| | | EP 0 907 064 A2 | 04-07-1999 | Dinuțescu, Horia A. | | Abstract |
| | | JP S57-102029 A | 09-28-1982 | HITACHI LTD. | | Abstract |

| NON PATENT LITERATURE DOCUMENTS | | | |
|--|-------------|---|--------------------------|
| Examiner Initials | Cite No. | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | Translation ⁶ |
|  | | International Search Report and Written Opinion mailed February 11, 2005 in a corresponding application. | |
| | | "Technique for Obtaining an Environmentally Secure Adhesive Seal"; IBM Technical Disclosure Bulletin; December 1, 1986; pages 3085-3087; Vol. 29, No. 7; XP002025799; ISSN: 0018-8689; IBM Corp.; New York, US. | |
| | | S. JAYARAMAN, O.M. KNIO, A.B. MANN, and T.P. WEIHS; "Numerical Predictions of Oscillatory Combustion in Reactive Multilayers"; Journal of Applied Physics; July 15, 1999; pp. 800-809; Vol. 86, No. 2. | |
| | | D. JOSELL, A. CEZAJRLIYAN, D. VAN HEERDEN, and B.T. MURRAY; "Thermal Diffusion Through Multilayer Coatings: Theory and Experiment"; NanoStructured Materials; 1997; pp. 727-736; Vol. 9, Nos. 1-8. | |

| | | | | | |
|---|---|----|--------------------------|-------------------------|-----------|
| IDS Form PTO/SB/08: Substitute for form 1449A/PTO | | | Complete if Known | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | | Application Number | 10/814,243 | |
| | | | Filing Date | April 1, 2004 | |
| | | | First Named Inventor | David Peter VAN HEERDEN | |
| | | | Art Unit | 3725 | |
| | | | Examiner Name | PARADISO, JOHN ROGER | |
| Sheet | 2 | of | 2 | Attorney Docket Number | 9118.0002 |

| NON PATENT LITERATURE DOCUMENTS | | | |
|---|--|--|--|
|  | | S. JAYARAMAN, A.B. MANN, O.M. KNIO, D. VAN HEERDEN, G. BAO, and T.P. WEIHS; "Modeling Self-Propagating Exothermic Reactions In Multilayer Systems"; Materials Research Society Symposium Proceedings; 1998; pp. 563-568; Vol. 481. | |
| | | K.J. BLOBAUM, D. VAN HEERDEN, A.J. GAVENS, and T.P. WEIHS; "Al/Ni Formation Reactions: Characterization of the Metastable Al ₆ Ni ₂ Phase and Analysis of Its Formation"; Acta Materialia; 2003; pp. 3871-3884; Vol. 51, No. 13. | |
| | | A.J. SWISTON JR., T.C. HUFNAGEL, and T.P. WEIHS; "Joining Bulk Metallic Glass Using Reactive Multilayer Foils"; Scripta Materialia; 2003; pp. 1575-1580; Vol. 48. | |
| | | U. ANSELMI-TAMBURINI and Z.A. Munir; "The Propagation of a Solid-State Combustion Wave in Ni-Al Foils"; Journal of Applied Physics; November 15, 1989; pp. 5039-5045; Vol. 66, No. 10. | |
|  | | A.J. GAVENS, D. VAN HEERDEN, A.B. MANN, M.E. REISS, and T.P. WEIHS; "Effect of Interdiffusion on Self-Propagating Exothermic Reactions in Al/Ni Nanolaminate Foils"; Journal of Applied Physics; February 1, 2000; pp. 1255-1263; Vol. 87, No. 3. | |
| | | | |
| | | | |
| | | | |

| | | | |
|--------------------|---|-----------------|---------|
| Examiner Signature |  | Date Considered | 2/16/06 |
|--------------------|---|-----------------|---------|

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.